

$$d = \sqrt{(x_2 - x_1)^2 + (y_2 - y_1)^2} \quad \begin{matrix} (-3, 7) \\ x & y \end{matrix}$$

$$x_m = \frac{x_1 + x_2}{2} \quad y_m = \frac{y_1 + y_2}{2}$$

p. 90 #1

$$x_1 = 4 \quad y_1 = 1 \quad x_2 = 8 \quad y_2 = 10$$

$$d = \sqrt{((8-4)^2 + (10-1)^2)}$$

$$x_m = -2 \quad y_m = 3$$

$$x_1 = -4 \quad y_1 = 8$$

$$x_2 = ? \quad y_2 = ?$$

$$x_m = \frac{x_1 + x_2}{2}$$

$$2(-2) = \frac{-4 + x_2}{2}$$

$$y_m = \frac{y_1 + y_2}{2}$$

$$\begin{array}{ccc} -4 & = & -4 + x_2 \\ +4 & & +4 \end{array} \quad x_2 = 0$$

$$y_m = \frac{y_1 + y_2}{2}$$

$$^2(3) = \left( \frac{8 + 42}{2} \right)$$

$$\begin{array}{r} 60 = 8 + 42 \\ -8 \quad -8 \\ \hline 42 = -2 \end{array}$$

$$x_1 = 10 \quad y_1 = -3$$

$$x_m = 3 \quad y_m = 5$$

$$x_2 = ? \quad y_2 = ?$$